

CLAIMS

What is claimed is:

1. Apparatus for securing a position of a side impact beam having U-shaped or trapezoidal cross section and formed with at least partially flattened ends, for execution of a subsequent, comprising:
two support blocks for supporting the ends;
two vertical clamping units associated to the support blocks, wherein the support blocks and the clamping units are placed into one-to-one correspondence;
a stop member for abutment by one of the ends; and
two transverse clamping units intended for clamping length sections of the side impact beam between the ends.
2. The apparatus of claim 1, wherein each of the transverse clamping units includes two elbow levers swingably mounted about horizontal axes in parallel relationship, each elbow lever having a vertical arm, a horizontal arm connected to the vertical arm, and an eccentric, wherein the eccentric of one elbow lever and the eccentric of the other elbow lever are rotatable about a common horizontal axis for contacting the horizontal arms in opposition to an elastic restoring force.

3. The apparatus of claim 2, wherein the horizontal arms of the two elbow levers extend in opposite directions.
4. The apparatus of claim 2, wherein the elastic restoring force is realized by compression springs which load the vertical arms of the elbow levers.
5. Apparatus for securing a side impact beam in place for allowing execution of a subsequent processing operation, comprising:
 - a support block for supporting one end of the side impact beam;
 - a first clamping unit for holding the end in cooperation with the support block to thereby secure the side impact beam in Y-direction;
 - a stop member for abutment of another end of the side impact beam to thereby secure the side impact beam in X-direction; and
 - a second clamping unit movable into a clamping position in which a length section of the side impact beam, extending inwardly of the end, is clamped from opposite sides to thereby secure the side impact beam in Z-direction.
6. The apparatus of claim 5, wherein the end is held on the support block by a three-point contact.

7. The apparatus of claim 5, wherein the first clamping unit includes a clamping bolt, and the support block includes a support pin having a pointed end, said clamping bolt and said support pin holding the one end at a point of contact therebetween.
8. The apparatus of claim 5, wherein the second clamping unit includes two elbow levers swingably mounted on opposite sides of the side impact beam for rotation about horizontal axes in parallel relationship, and two eccentrics mounted on a common shaft for moving the elbow levers into the clamping position in opposition to an elastic restoring force.
9. The apparatus of claim 8, wherein the elastic restoring force is realized by two compression springs for loading the vertical arms of the elbow levers in a direction away from the operative position.
10. The apparatus of claim 8, wherein the horizontal and vertical arms of each elbow lever have each a free end shaped in a convex configuration.